

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 A61F13/56 B29C65/08 B23K20/10

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 A61F B29C B23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 531 666 A (UNI CHARM CORP) 17 March 1993 (1993-03-17)  column 7, line 27-52; figures 7A,7B ---	1,3,4, 8-10, 14-19, 21-24
X	US 6 309 487 B1 (THARPE JOHN M ET AL) 30 October 2001 (2001-10-30) figure 6A ---	1,21
X	US 5 545 275 A (THARPE JOHN M ET AL) 13 August 1996 (1996-08-13) column 5, line 4-63; figure 6A ---	1,21
X	US 5 788 797 A (THARPE JOHN M ET AL) 4 August 1998 (1998-08-04) figure 6A ---	1,21
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

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Date of the actual completion of the international search

27 January 2004

Date of mailing of the international search report

03/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
Fax: (+31-70) 340-3016

Authorized officer

Schweissguth, M

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 823 783 A (WILLHITE JR WILLIAM ET AL) 25 April 1989 (1989-04-25) figure 3 ---	1-26
A	WO 01 70159 A (SCA HYGIENE PROD AB) 27 September 2001 (2001-09-27) figures 10,13-15 -----	1-26

## Information on patent family members

International Application No

PCT/US 03/26248

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